

1/17

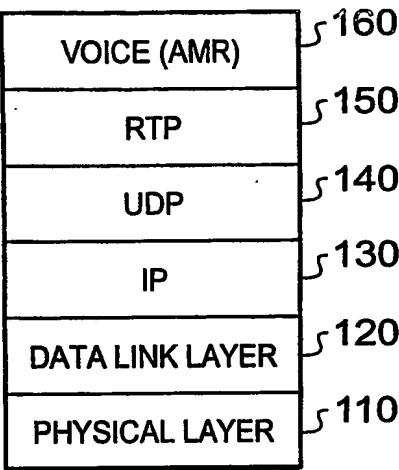


Fig. 1

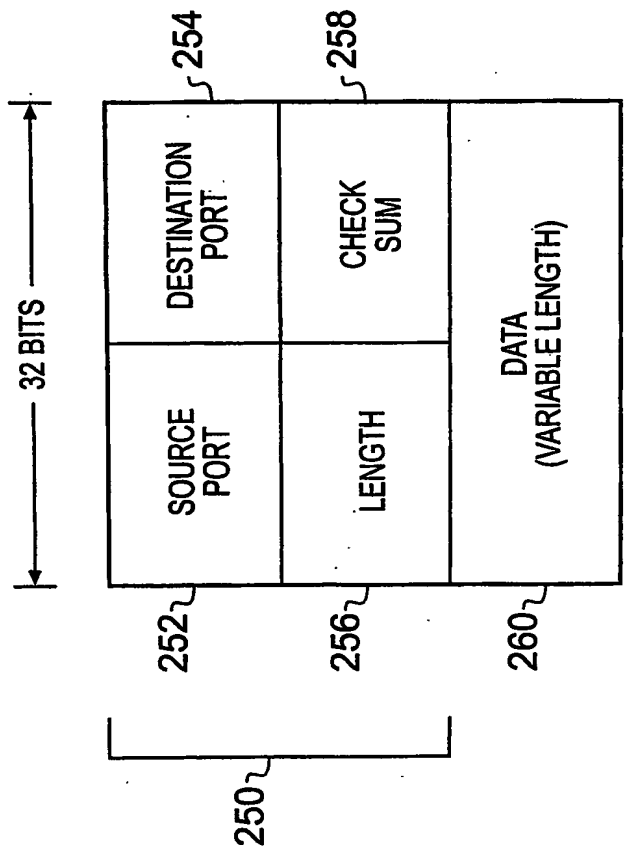


Fig. 2

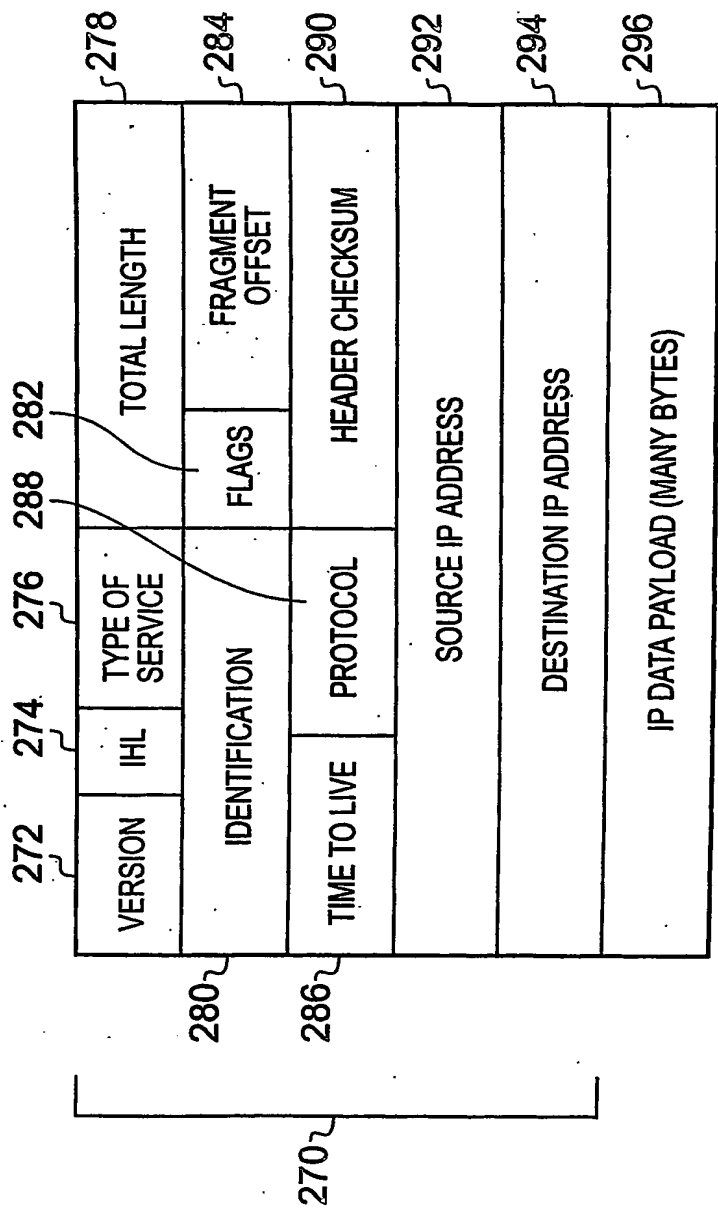


Fig. 3

4/17

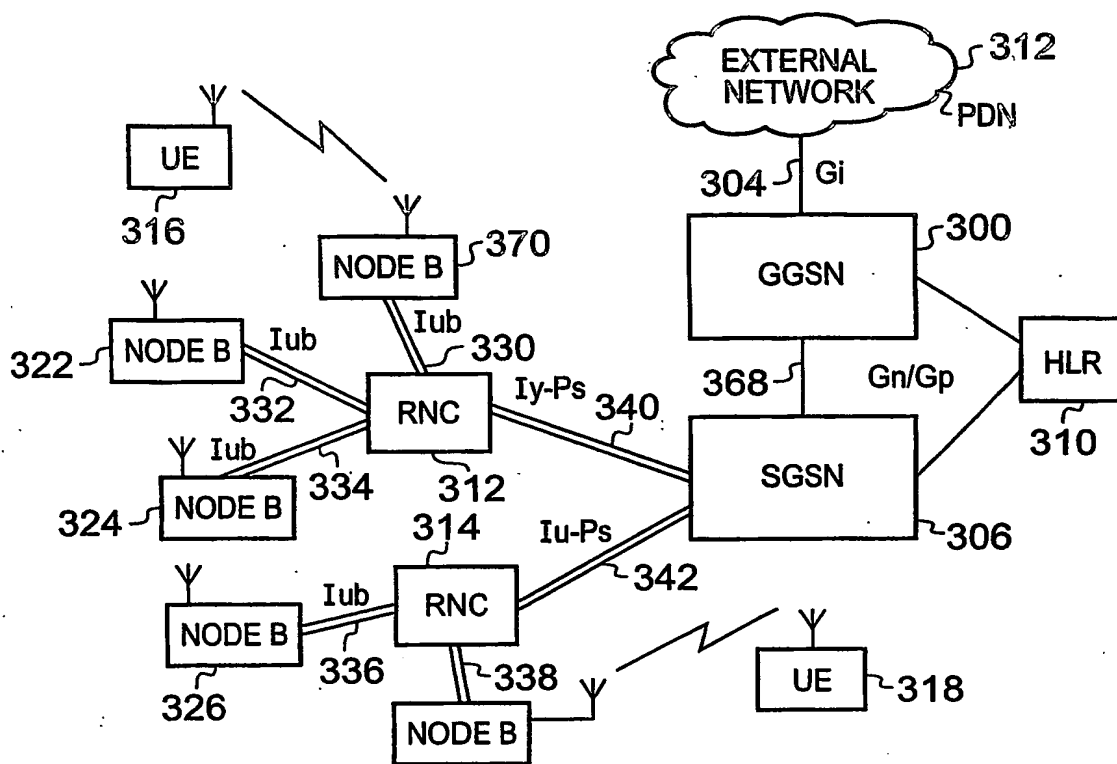


Fig. 4

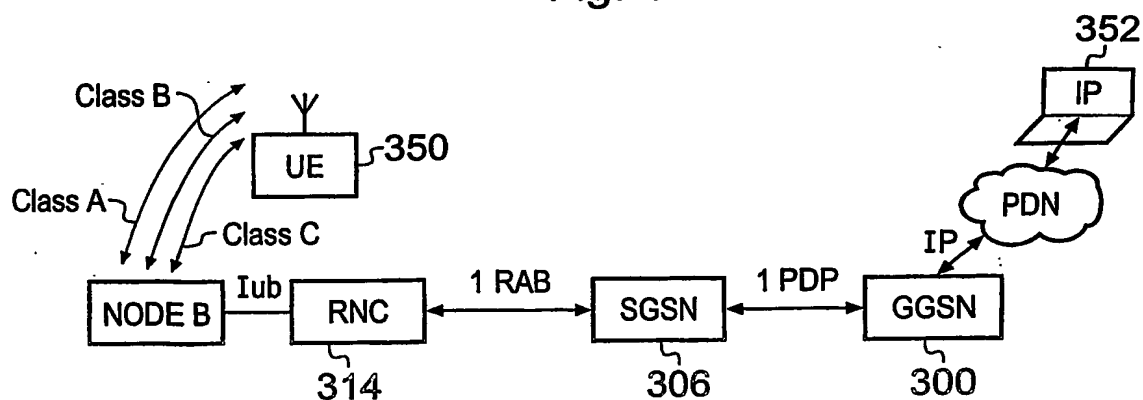


Fig. 5

5/17

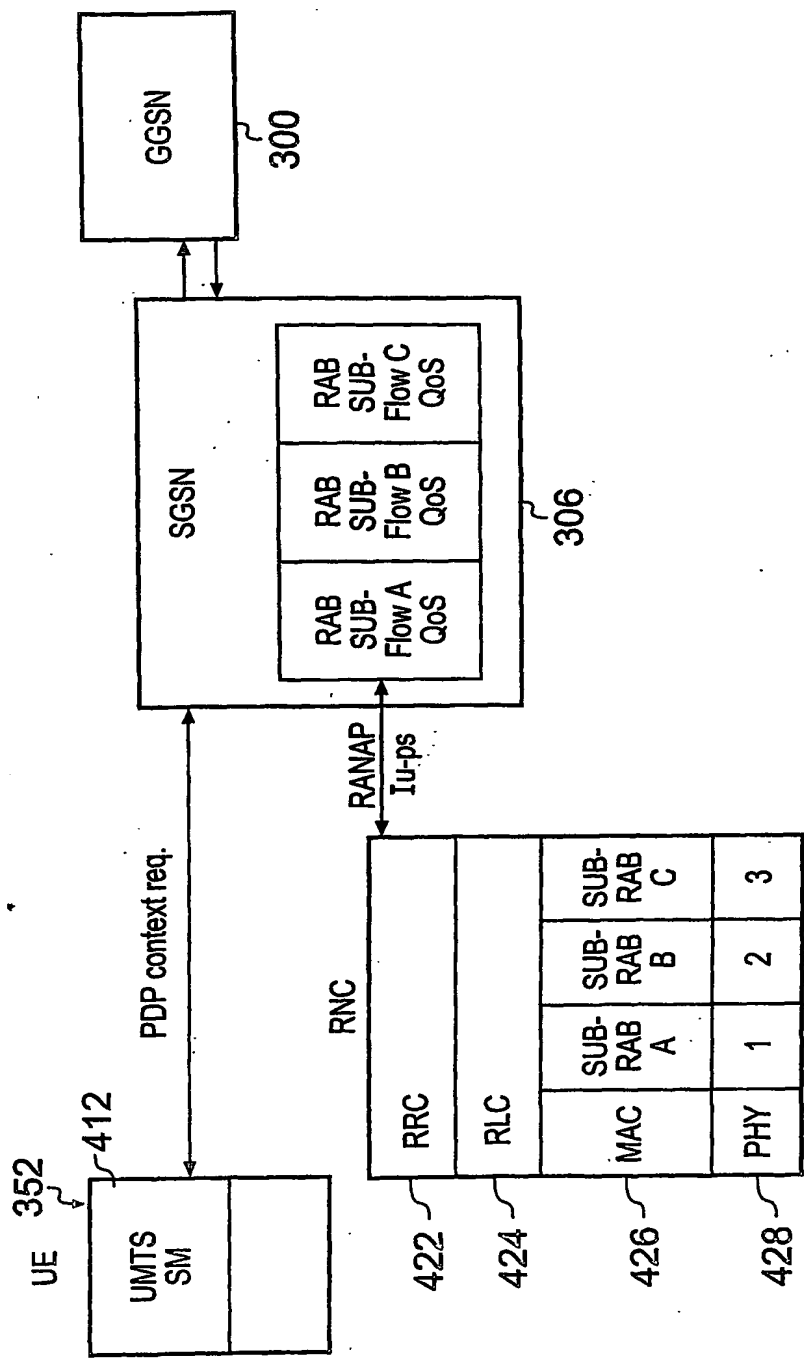


Fig. 6

6/17

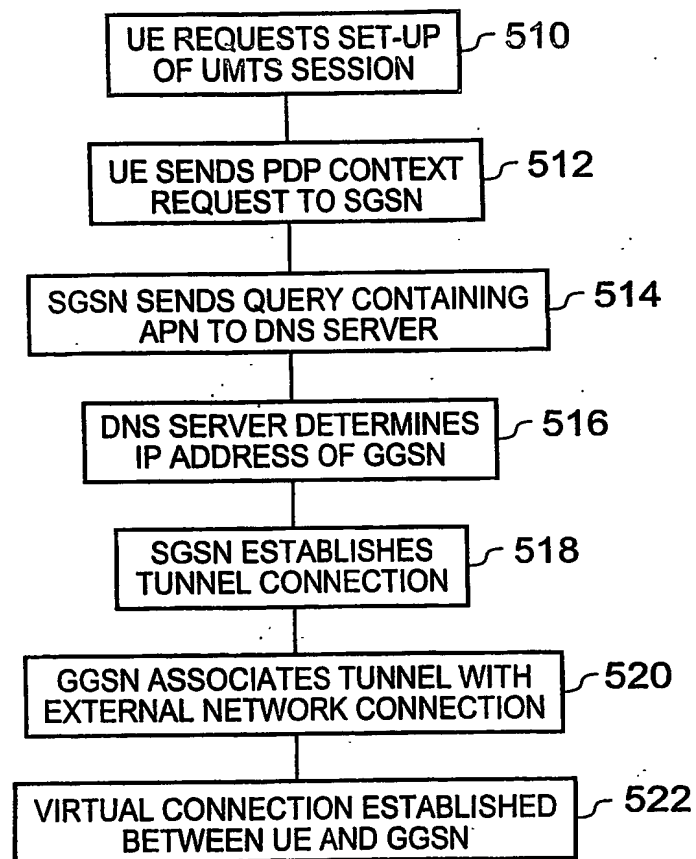


Fig. 7

7/17

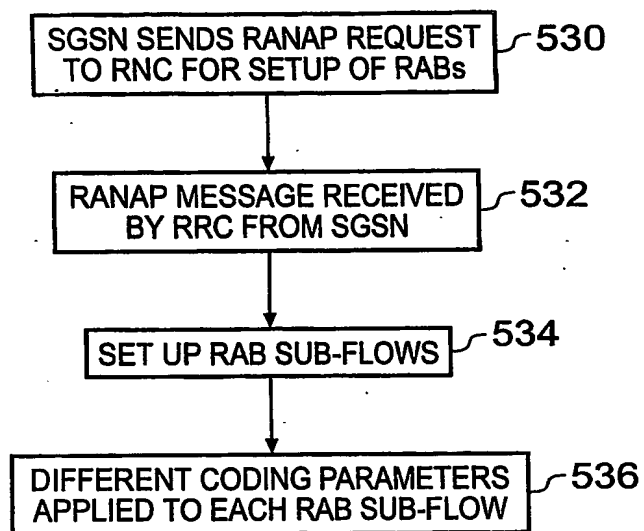


Fig. 8

8/17

Table 1

RAB service attribute	RAB service attribute value		Comments
Traffic Class	Conversational		
RAB Asymmetry Indicator	Symmetric, bidirectional		Symmetric RABs are used for uplink and downlink
Maximum bit rate	12,65 kbit/s in configurations 0 and 1 15,85 kbit/s in configurations 2 and 3 23,85 kbit/s in configurations 4 and 5		This value depends on the highest mode rate in the RFCS (note 2)
Guaranteed bit rate	6,60 kbit/s		One of the values chosen, depending on the lowest rate controllable SDU format (note 2)
Delivery Order	Yes		(note 1)
Maximum SDU size	253 in configurations 0 and 1 317 in configurations 2 and 3 477 in configurations 4 and 5		Maximum size of payload field in lu UP, according to the highest mode rate in the RFCS (note 2)
Traffic Handling Priority	Not applicable		Parameter not applicable for the conversational traffic class (note 1)
Source statistics descriptor	Speech		(note 1)
SDU Parameters	RAB subflow 1 (Class A bits)	RAB subflow 2 (Class B bits)	The number of SDU, their number of RAB subflow is subject to operator tuning (note 3)

Fig. 9 (continued on page 9/17)



9/17

SDU error ratio	$7 \times 10^{-3}$	-	(note 3)
Residual bit error ratio	$10^{-6}$	$10^{-3}$	(note 3 - applicable for every subflow)
Delivery of erroneous SDUs	Yes	-	Class A bits are delivered with error indication; Class B bits are delivered without any error indication
SDU format information 1-5			(note 4)
sub-flow SDU size 1-5	(note 5)	(note 5)	

NOTE 1: These parameters apply to all UMTS speech codec types.

NOTE 2: The guaranteed bit rate depends on the periodicity and the lowest rate controllable SDU size. All UMTS AMR-WB configurations as defined in TS 26.103 contain the 6.60 kbps codec mode as lowest and therefore "guaranteed bit rate". The "maximum bit rate" and the "maximum SDU size" depend on the selected UMTS AMR-WB configuration.

NOTE 3: These parameters are subject to operator tuning.

NOTE 4: SDU format information has to be specified for each AMR-WBcore frame type (i.e. with speech bits and comfort noise bits) included in the RFCS as defined in [2].

NOTE 5: The subflow SDU size corresponding to an AMR-WBcore frame type indicates the number of bits in the class A, class B fields as specified in Table 2 (see Fig.10)

Fig. 9 (continued from page 8/17)

Table 2:

Frame Type Index	No of Class A Bits per frame	No of Class B Bits per frame	No of Class C Bits per frame	Total No. of Bits per frame
1	64	113	0	198
2	72	181	0	274
3	72	213	0	306
4	72	245	0	338
5	72	293	0	386

Fig. 10

11/17

UMTS_AMR-WB	RAB sub-flows		Total number of bits per RAB sub-flow combination (Mandatory)	Source rate
RFCI	RAB sub-flow 1 (Optional)	RAB sub-flow 2 (Optional)		
Example 1				
1	40	0	40	AMR-WB SID
2	54	78	132	AMR-WB 6.6 kbps
3	64	113	177	AMR-WB 8.85 kbps
4	72	181	253	AMR-WB 12.65 kbps
Example 2				
1	40	0	40	AMR-WB SID
2	54	78	132	AMR-WB 6.6 kbps
3	64	113	177	AMR-WB 8.85 kbps
4	72	181	253	AMR-WB 12.65 kbps
5	73	244	317	AMR-WB 15.85 kbps
Example 3				
1	40	0	40	AMR-WB SID
2	54	78	132	AMR-WB 6.6 kbps
3	64	113	177	AMR-WB 8.85 kbps
4	72	181	253	AMR-WB 12.65 kbps
5	74	403	477	AMR-WB 23.85 kbps

Fig. 11

Table 3

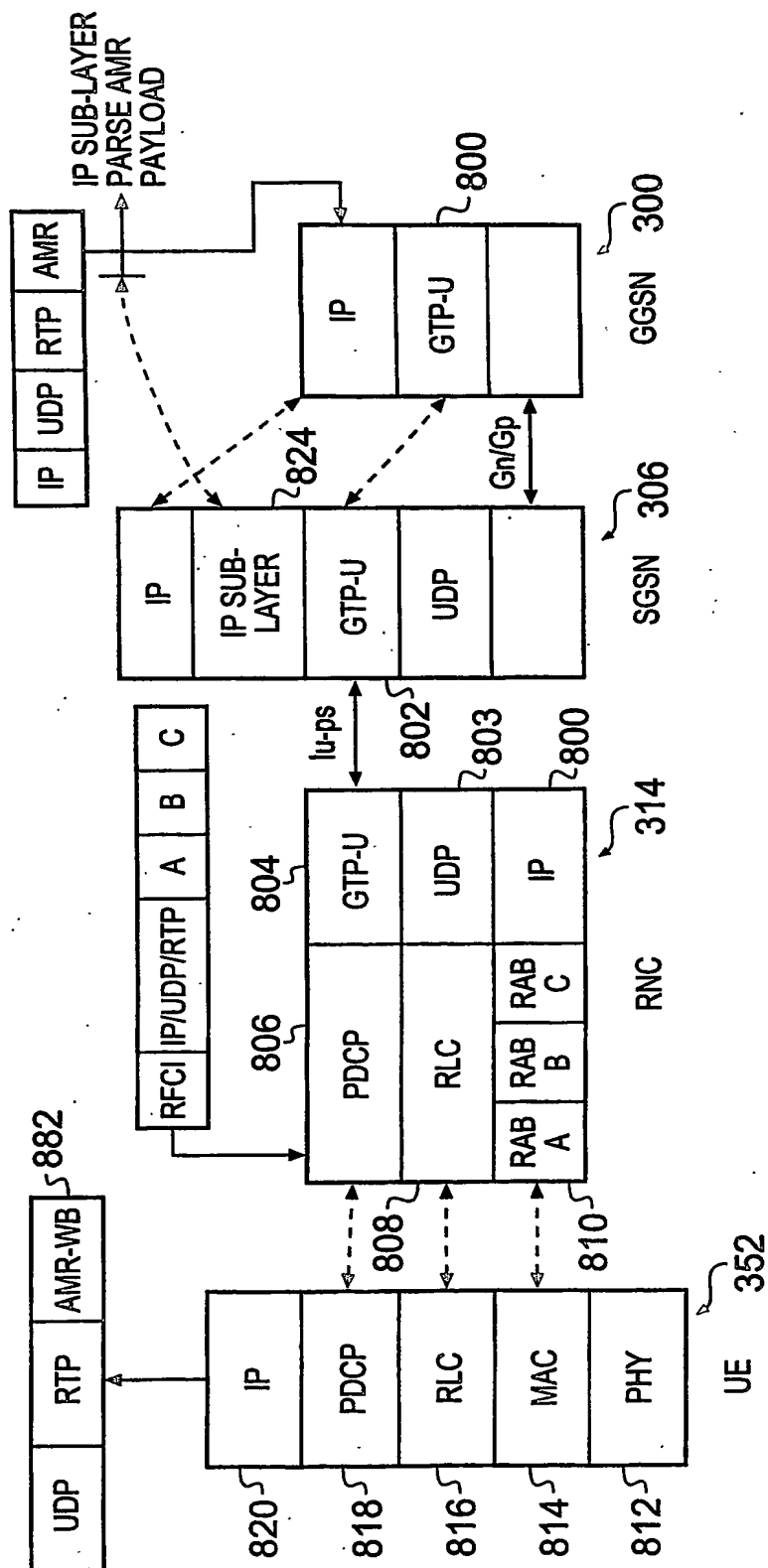
8	7	6	5	4	3	2	1	Octet 1
Quality of service IEI								Octet 2
Length of quality of service IE								Octet 3
0 0 spare		Delay class		Reliability class				Octet 4
Peak throughput		0 spare		Precedence class				Octet 5
0 0 0 spare		Mean throughput						Octet 6
Traffic Class		Delivery order		Delivery of erroneous SDU				Octet 7
Maximum SDU size								Octet 8
Maximum bit rate for uplink								Octet 9
Maximum bit rate for downlink								Octet 10
Residual BER		SDU error ratio						Octet 11
Transfer delay		Traffic Handling priority						Octet 12
Guaranteed bit rate for uplink								Octet 13
Guaranteed bit rate for downlink								

Fig. 12

8	7	6	5	4	3	2	1	Octet 1
Quality of service IE								Octet 2
Length of quality of service IE								Octet 3
0 0 spare	Delay class	Reliability class					Octet 4	
Peak throughput	0 spare	Precedence class					Octet 5	
Optional QoS Indication Bits	Mean throughput							Octet 6
Traffic Class	Delivery order	Delivery of erroneous SDU					Octet 7	
Maximum SDU size								Octet 8
Maximum bit rate for uplink								Octet 9
Maximum bit rate for downlink								Octet 10
Residual BER	SDU error ratio							Octet 11
Transfer delay					Traffic Handling priority			Octet 12
Guaranteed bit rate for uplink								Octet 13
Guaranteed bit rate for downlink								Octet 14
QoS optional field 1								Octet 22
QoS optional field 2								Octet 23
								Octet 31

Fig. 13

14/17



**Fig. 14**

15/17

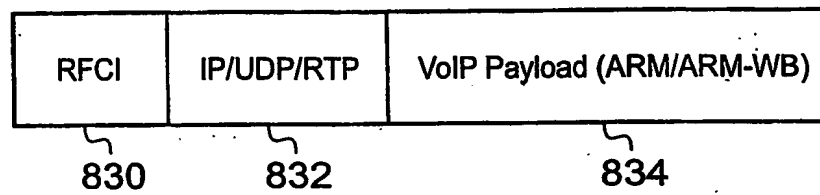


Fig. 15

16/17

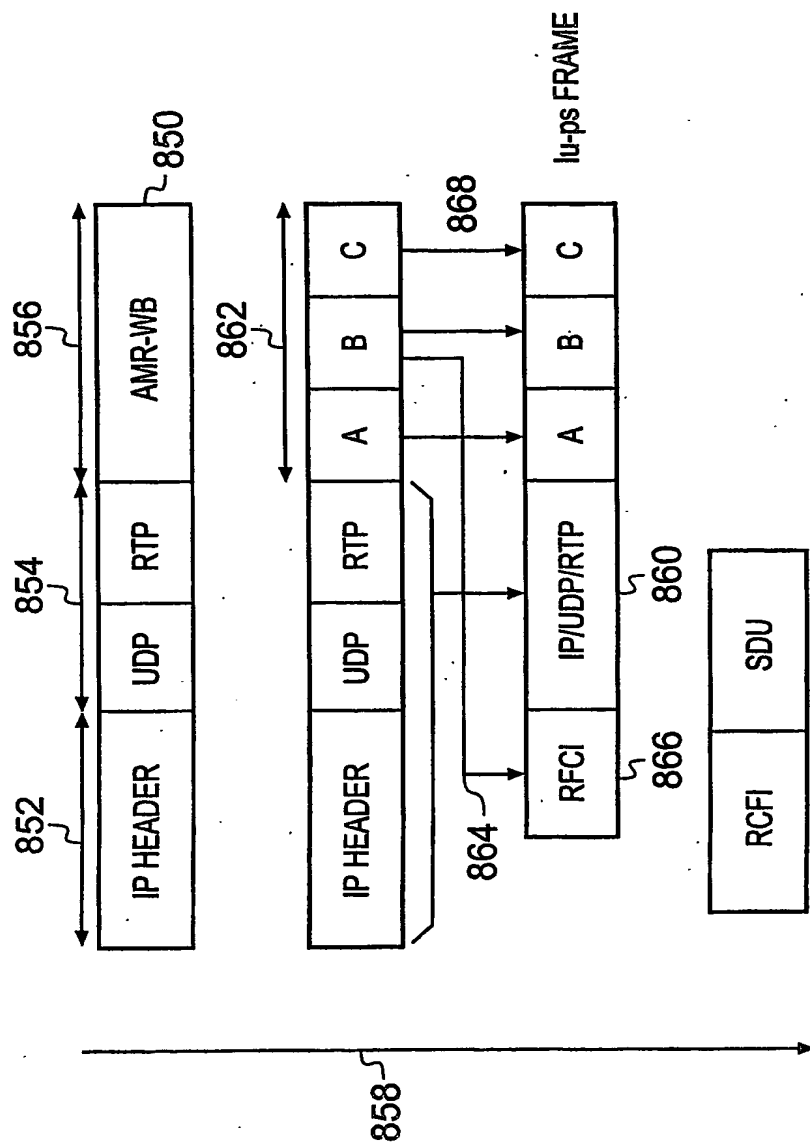


Fig. 16



17/17

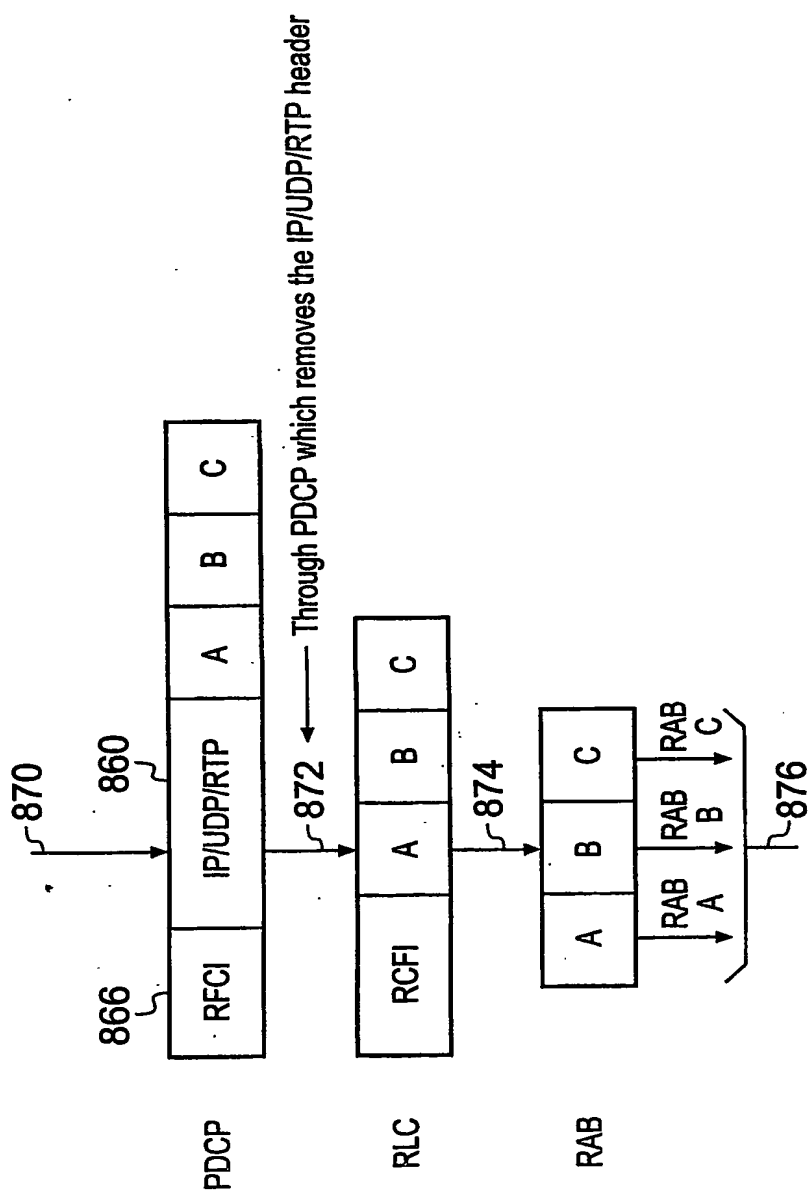


Fig. 17